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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,057	10/12/2004	Hubert Baumgart	PAT-00293	2264
26922	7590	08/12/2005	EXAMINER	
BASF CORPORATION ANNE GERRY SABOURIN 26701 TELEGRAPH ROAD SOUTHFIELD, MI 48034-2442			HUANG, MEI QI	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,057

Applicant(s)

BAUMGART ET AL.

Examiner

Mei Q. Huang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/12/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities: In line 3, It is suggested to replace the comma after "polyvinyl esters" with semicolon, i.e. amend the limitation "... polyvinyl esters," to "... polyvinyl esters;" Appropriate correction is required.
2. Claim 19 is objected to because of the following informalities: The second line from the last line, "or" should be changed to "and". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The primarily amended claim cites "The of claim 1, wherein the mixture is one of a coating material, an adhesive, or a sealing compound". It is not clear what the scope of the claim is. For the purpose of examination, the examiner herein interprets this claim as "the mixture according to claim 1, used as coating material, an adhesive, or a sealing compound" or "the mixture according to claim 1, wherein the mixture is one of a coating material, an adhesive, and a sealing compound".

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

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USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 1-6 and 8-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/473,730. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed heat-curable thixotropic mixture is seen to have the same composition as identified in the claim 1 of the copending application. The claim 1 of the copending application further identify that the component B, an urea derivative thixotropic agent, prepared by reacting at least one amine and/or water with at least one isocyanate in the presence of at least one amino resin. Given the overlap in scope, the instantly claimed invention is rendered *prima facie* obvious by the claim of the copending application..

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claim 7 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-4 of copending Application No. 10/473,730. Although the conflicting claims are not identical, they are not patentably distinct from each other because the species of the monoamines required by the instant claim 7, i.e. methoxypropylamine, benzylamine, and n-hexylamine, can be seen in the specification of the copending Application, page 14, line 7. It would have been obvious

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to one having ordinary skill in the art at the time the invention was made to use the species of the monoamine, as taught by the copending application, thus, to arrive at the instant claim 7 because the copending application claims the identical subject matter as the present application.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1, 4-9, 13-14 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barancyk et al. (US Patent 6,111,001) in view of Melamed (US Patent 2,847,399).

The prior art to Barancyk et al. discloses a composition comprising:

- (a) a polymer containing pendant and/or functional groups selected from the group consisting of carbamate, urethane and /or amide functional groups; and
- (b) a rheology modifier comprising the reaction product of an amine and an isocyanate (Abstract). Examples of isocyanate include polyisocyanates (column 7, lines

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15-44). The compositions are useful for a variety of applications such as adhesives, sealants and surface coatings (Abstract). The composition can be thermally cured (column 9, lines 36+).

The difference between the prior art and the present application is that Barancyke et als' polymer component does not contain the allophanate group as required by the instant claim 1.

The prior art to Melamed provides unsaturated derivatives of alkylolamines and their polymerization products. Alkyl allophanate compounds represented by Formulas (I) through (III) are disclosed at column 1, lines 29-46. The homo-polymers of the compounds of Formula (I) with methyl acrylate or methyl methacrylate can be formed into solvent-soluble coatings or films (column 2, lines 59-70). Melamed further teaches the benefit of the polymers and copolymers of the invention. Melamed discloses that the polymers and copolymers have the general usefulness of resinous materials in coating, impregnating or molding compositions. They give thermally stable shaped structures such as fibers and films and they can be hydrolyzed to polyprimary amines which are useful modifying agents for a number of synthetic polymers, and are also useful, for example, for improving the wet strength of papers and as ingredients in adhesives and water paints (column 4, lines 11-19).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the allophanate group, as taught by Melamed, in Barancyk et als' carbamate-containing polymer because Melamed teaches the benefit of the polymer, which has the same backbone, containing such allophanate group. Furthermore, Melamed's invention meets the same endeavor of Barancyke's, i.e. a polymer mixture being used as coatings or adhesives.

As to claims 4-5, see Barancyk et als' disclosure at column 2, line 3, to column 5, 38, for the backbone of the polymer containing the functional groups. Specifically, acrylic polymers, such as methyl methacrylate, ethyl methacrylate; vinyl aromatic compounds, such as styrene; and hydroxyl functional monomers, such as hydroxyethyl acrylate are shown at column 2, lines 9-10, 44-46, and 53-57.

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As to claims 6-7, the amine compounds including benzylamine and hexylamine can be seen at column 7, lines 1-11.

As to claims 8-9, the isocyanate compounds including polyfunctional monomeric isocyanates, such as 1,6-hexamethylene diisocyanate is taught at column 7, lines 41-43.

As to claims 13-14, the rejection made for claim 1 and 4-5 described above in this Office Action would be applied herein to reject claims 13-14.

As to claim 16, Barancyke et als' working example D at column 13 demonstrates a method of preparing a rheology modifier dispersed in an acrylic polymer having both carbamate and hydroxyl functional groups. The working example C at column 12 shows a method of making the rheology modifier in the presence of an acrylic polymer.

As to claims 17-19, see Barancyke et als' disclosure at column 9, lines 31-35, line 44, line 47-49, for the industrial applicability of the composition.

11. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barancyk et al. (US Patent 6,111,001) in view of Melamed (US Patent 2,847,399) as applied to claim 1 above, and further in view of Piestert (US Patent 5,264,486).

Both Barancyk '001 and Melamed '399 do not teach the use of a silica compound in the thixotropic agent. The prior art to Piestert relates to 2-component polyurethane sealants for the direct glazing of motor vehicles. Thixotropic agent, such as pyrogenic silica or urea compound is included (column 7, line 14-18).

Piestert teaches that the thixotropic agent can be pyrogenic silica or urea compound which can be mixed with polyurethane polymers and Barancyke et als' thixotropic agent also contains urea compound. One having ordinary skill in the art at the time the invention was made would appreciate such a compatibility of pyrogenic silica and urea compound as thixotropic agent in mixing with the similar urethane containing polymers, and, accordingly, include pyrogenic silica, as taught by Piestert, in Barancyke et als' thixotropic agent, motivated by a reasonable expectation of success.

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12. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barancyk et al. (US Patent 6,111,001) in view of Melamed (US Patent 2,847,399) as applied to claim 1 above, and further in view of Klemarczyk et al. (US Patent 5,679,719).

Barancyk et al. indicate that surfactants (i.e. wetting agent) can be included in the composition of the invention. Barancyk et al. do not specify the species of such surfactant.

The prior art to Klemarczyk et al. teaches resin compositions comprising an epoxy component and olefinically unsaturated monomer component. Wetting agent is included in all the working examples and the wetting agent herein is a fluorinated surfactant (column 19, the third line of the fine prints below Table I).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use such wetting agent, as taught by Klemarczyk et al., in Barancyk et al.'s curable composition because Klemarczyk et al. have demonstrated the advantageous coating composition including such wetting agent in a polymer with the same olefinically unsaturated backbone.

13. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barancyk et al. (US Patent 6,111,001) in view of Melamed (US Patent 2,847,399) as applied to claim 1 above, and further in view of Rehfuß et al. (US Patent 5,356,669).

Barancyk et al. include a curing agent (i.e. crosslinking agent) having functional groups reactive with the functional groups of the polymer (a) (Abstract). The crosslinking agent is an aminoplast resin (column 8, lines 27-28), which is different from the instantly claimed crosslinking agent, such as blocked polyisocyanates.

The prior art to Rehfuß et al. provides a clear coating composition comprising a polymer backbone having appended thereto at least one carbamate functional group (Abstract). Rehfuß et al. teach crosslinking agent which is reactive with the functional groups of the polymer, for example, the crosslinking agent may be an aminoplast resin, isocyanate and blocked isocyanates, and acid or anhydride functional crosslinking agents (column 5, lines 44-51).

Rehfuss et al. herein teach the interchangeability of aminoplast resin and blocked isocyanates as functionally equivalent crosslinking agent in a substantially identical carbamate-containing polymer composition. Thus, it would have been obvious to one of ordinary skill in the art to replace the aminoplast resin crosslinking agent in Barancyk et als' carbamate-containing polymer composition with Rehfuss et als' blocked isocyanate crosslinking agent based on their expected interchangeability as functionally equivalent crosslinking agent, motivated by a reasonable expectation of success. *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mei Q. Huang whose telephone number is (571) 272-3549. The examiner can normally be reached on 8am - 4pm, Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mei Q. Huang
Examiner

August 5, 2005


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